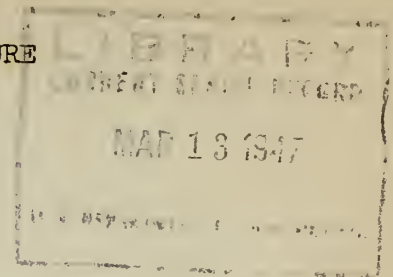


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GYPSY MOTH ERADICATION POSSIBLE
WITH DDT AND AIRPLANE SPRAYING

The U. S. Department of Agriculture this year starts its annual campaign against the gypsy moth with higher hopes than ever before for the eventual eradication of this destructive insect pest. Department entomologists base this hope on the results of last year's campaign, when new insecticides and new devices for their application were used with telling effect. DDT, it was found, kills every young gypsy moth caterpillar coming in contact with it. New ground equipment sends concentrated DDT solutions out as an atomized mist into the tops of the highest trees and all through the thick foliage. Airplanes fitted with various devices throw out a highly concentrated DDT solution as a very fine mist over a 100-foot swath at the rate of 30 acres every 3 minutes. Aside from being more effective than any control measure ever tried before, these new methods reduce control costs by 90 percent, according to Dr. P. N. Annand, Chief of the Bureau of Entomology and Plant Quarantine, the Government agency charged with gypsy moth control.

Today's gypsy moth infestation of several million acres in six New England States, Pennsylvania, and New York stems from the introduction of a few moths in 1869. A French mathematician and astronomer had an idea he could create a silkworm industry in the United States by crossing gypsy moths imported from Europe with silkworm moths from Japan. His experiment did not work, however, and some of his gypsy moths escaped to found a family that was to prove extremely costly to their new homeland.

By the time the threat of the gypsy moth to American farms and forests had become apparent, the insect was so firmly entrenched over so wide an area that no control methods then known could eradicate it. All State and Federal control officials could hope to accomplish was to stop its spread through plant quarantines that would prevent hitch hiking into uninfested territory. But no quarantines can stop the wind from blowing the light and hairy gypsy moth caterpillars farther afield. To meet this difficulty, Federal plant quarantine officials set up a barrier zone running from the Canadian border to the Atlantic Ocean through New York on the west and Vermont, Massachusetts, and Connecticut on the east. Periodic surveys in this zone have revealed advances made by the moth. Control measures, concentrated at each new center thus shown, have kept the infestation in bounds for more than 20 years.

The accompanying pictures show how plant quarantine officials of the U. S. Department of Agriculture keep track of possible avenues of gypsy moth movements and how the entomologists proceed against this insect pest.

100
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